#### BASE ORDER 11300.1K

From: Commanding General

To: Distribution List

Subj: ENERGY CONSERVATION PROGRAM

Ref: (a) MCO P11000.9B

- (b) OPNAVINST 4100.5C
- (c) BO 4720.2F
- (d) BO 11010.1J

Encl: (1) Sample Assignment Letter for Energy Conservation Building Monitors

- (2) Electrical Power Conservation Program
- (3) Fossil Fuel Conservation Program
- (4) Weekly Energy Log
- (5) Quarterly Building Energy Monitor Checklist (Report Control Symbol MCLBA-11300-01)

Report Required: Quarterly Building Energy Monitor Checklist (Report Control Symbol MCLBA-11300-01)

## 1. Purpose

- a. To state Base policy relating to conservation of energy and conservation of utilities.
- b. To establish procedures for conserving energy and reducing utility consumption Base-wide.
- 2. Cancellation. BO 11300.1J
- 3. <u>Background</u>. The requirement to conserve energy and reduce utility consumption is well understood and is re-emphasized in references (a) and (b). With experienced shortages of fossil fuels and purchased electricity, it is imperative that a local program for energy conservation/utility consumption reduction be formulated. However, there can be no rigid set of conservation procedures established, as it may become necessary to restrict consumption of

all or only a few available sources of energy. For example, an immediate requirement to reduce electrical load may result in a temporary increase in diesel fuel consumption. Thus, specific steps to be taken to conserve energy and/or reduce utilities consumption will depend on the situation confronted, time of year, and the operational entity affected.

#### 4. Action

- a. The Director, Facilities and Services Division is designated as the overall energy conservation program coordinator for the Marine Corps Logistics Base, Albany, Georgia. Day-to-day technical assistance will be furnished by the Maintenance Officer and by the Public Works Officer, pursuant to references (c) and (d), respectively, and the provisions of this Order. Similarly, day-to-day assistance will be provided by the Head, Base Garrison Mobile Equipment Branch and the Housing Officer, as appropriate.
- b. Executive Director for Logistics Operations; Chief of Staff; Executive Director Financial Management; Principal Directors of Directorates; Division Directors; Commanding Officer, Headquarters Battalion; Special Staff Officers; and Officers in Charge of Tenant Activities will:
- (1) Familiarize themselves with the contents of this Order and ensure its widest dissemination.
- (2) Assign building energy conservation monitors and alternates utilizing the format in enclosure (1).
- (3) Submit list of personnel assigned as energy monitors and alternates to the Director, Facilities and Services Division (Code 555) by 30 April each year. This list will include number of the building, monitor's name, and telephone extension.
  - c. Building energy conservation monitors/alternates will:
- (1) Familiarize themselves with the contents of this Order, particularly enclosures (2) and (3).
- (2) Be the point of contact for building energy-related matters. Coordinate, explain, and discuss energy policies and regulations with cognizant personnel.
- (3) Check areas of responsibility daily to ensure proper energy conservation is being practiced.

- (4) Monitor energy conservation operations of assigned areas on a weekly basis and record results on enclosure (4). These results should be maintained and available during the quarterly inspections.
- (5) Hold periodic meetings with cognizant supervisors/branch/section heads to alert them to possible energy waste in their respective areas and to solicit their suggestions for improvements to the energy conservation program. Discrepancies reported during these meetings which are not readily resolved should be reported to higher authority.
- (6) Prepare and submit enclosure (5) to the Director, Facilities and Services Division (Code 555) at the end of each quarter.
  - (7) Attend all energy conservation meetings as directed.
- 5. <u>Summary of Revision</u>. This revision contains a substantial number of changes and should be completely reviewed. Primary revision is contained in the area of building energy conservation monitors and is applicable to all areas Base-wide.
- 6. <u>Applicability</u>. This Order is not applicable to the Blount Island Command.

A. J. FINGER Chief of Staff

**DISTRIBUTION: E** 

# SAMPLE ASSIGNMENT LETTER FOR ENERGY CONSERVATION BUILDING MONITORS RECEIPTS SECTION

Preferred Quality Control Division Marine Corps Logistics Base Albany, Georgia 31704-5000

11300 Code 123/X5551 19 March 1990 From: Head

To: Mr. Bob S. Worker

Subj: COLLATERAL DUTIES

Ref: (a) BO 11300.1K

1. You are hereby assigned collateral duties as Energy Conservation Building Monitor for Building 1234. Procedures and guidance are provided in the reference.

W. L. BOSS ENCLOSURE (1)

#### ELECTRICAL POWER CONSERVATION PROGRAM

- 1. <u>General</u>. Conservation measures are to be taken on a continuing basis, with attention given at all times to securing buildings, structures, and equipment not in use. Alertness by the building/facility users can reduce electrical power consumption by 10% or more.
- 2. <u>Electric Lighting</u>. Users shall reduce prevailing lighting levels to Headquarters Marine Corps-established norms. Requests for technical advice and/or work to adjust lighting levels shall be made to the Base Maintenance Officer. To further identify and control unnecessary electrical energy consumption, lighting circuit breaker panel boards in major occupied buildings should be marked so that after-hours duty personnel will be able to detect/correct unnecessary use of lighting. To promote uniformity, the following colors, to be applied opposite the circuit numbers as shown on the panel board directory, will denote desired after-hours status of lighting circuit breakers:

#### Color Used Desired Status

Red "Off" at all times, except for emergencies Yellow "Off" from 1700-0700 and on weekends and holidays

Blue "Off" from 1700-0700 daily

Green "Off" during normal lunch period

Black, White or "On" at all times No Color

Assistance in updating circuit directories may be obtained by submitting work requests to the Base Maintenance Officer. Building users are expected to color-code circuit directories and familiarize personnel as best suits the user's own particular mode of operation. Buildings/structures considered appropriate for intensive electrical lighting load-reduction efforts are the administrative-type.

#### 3. Air Conditioning and Mechanical Ventilation

- a. These systems are installed and operated for environmental control of spaces to permit proper functioning of equipment, or an industrial-type process, or to protect stored goods within the affected space. A secondary consideration is to promote human comfort and worker efficiency.
  - b. With respect to environmental control:
- (1) The operator/user of the space must ensure that control is used only to the extent needed and ensure that process equipment is used only as needed in order to reduce internal cooling loads.
- (2) The Maintenance Officer will ensure that heating, ventilating, and air conditioning equipment is maintained at optimum efficiency by application of preventive and corrective maintenance. Machinery serving computer equipment spaces will be maintained per manufacturer's required levels.
  - c. With respect to comfort cooling and related mechanical ventilation:
- (1) The operator/user of the space must ensure that a control set point no lower than 76 degrees F is maintained. During seasons when the ambient outdoor temperature is 80 degrees F or below, comfort cooling should not be required.
- (2) The Maintenance Officer will ensure that necessary equipment for personnel comfort is maintained at optimum operating efficiency by application of preventive and corrective maintenance.
- 4. <u>Compressed Air Systems</u>. Extensive use of these systems is made in some areas on Base, typically, in commercial-industrial activities. Almost all the compressed air is produced by consumption of electrical energy. Electrical energy is wasted when air is compressed to greater pressure than needed, when compressed air is misused, and when leaks in compressed air piping systems exist.
- a. Users of building compressed air systems shall make periodic visual/auditory inspections of the installed system. Deficiencies found will be reported for correction.
- b. The Maintenance Officer shall act to correct reported deficiencies. Preventive and corrective maintenance will be scheduled, resources permitting, to maintain optimum overall efficiency of the compressed air plant/system.

- 5. <u>Electrical Load Reduction Plan</u>. Contingency planning must include provisions for potential energy shortages. Shortages may develop at any time, i.e., during extremely cold or extremely hot weather, but could occur at any time as a result of a generating plant accident.
- a. The following facilities are expected to remain in operation, but use will be made of engine-driven equipment/generators:

#### Facility Remarks

PMO (7520) Secure comfort cooling

Indus. Waste Treatment Plant (2600) Operate alternate power source

Navy AUTODIN (1360) Operate alternate power source

Base computer operations (3500) Operate alternate power source

Admin Offices (3500/3600/3700) Secure comfort cooling

Garrison Mobile Equipment (5400/5410) Secure comfort cooling

Warehouse (1221) Secure comfort cooling

Repair Division (2200/2202/2204) Secure comfort cooling

Well Houses (1462/4500/10100) Operate diesel pump

Fire Station (1210) Secure comfort cooling

Communications Center (3500) Operate alternate power source

BEQ's Secure comfort cooling

BOQ (10201/10202) Secure comfort cooling

Enlisted Dining Facility (7100) Secure comfort cooling

Civilian Personnel Office (3010) Secure comfort cooling

Marine Corps Exchange (7500) Secure comfort cooling

b. The following facilities are expected to be secured for the duration of the load-reduction period:

All swimming pools/bath houses

All coffee messes

All vending machines

All lighted playing fields

Base Gym

Base Theater

Hobby Shops

Clubs

c. The following temperatures for domestic hot water will be set:

# **Location Temperature Setting**

All latrines, heads, toilet facilities without showers/tubs, and buildings with only a few showers or with low usage 100 degrees F

All latrines, heads, toilet facilities with showers/tubs, and buildings with both heavy and frequent use of bathing facilities that have a common hot water supply system 105 degrees F

Family housing without dishwasher 120 degrees F Family housing with dishwasher 140 degrees F ENCLOSURE (2)

#### FOSSIL FUEL CONSERVATION PROGRAM

- 1. <u>General</u>. Fossil fuels include natural and LP gas, heating fuel, motor gasoline, diesel fuel, and lubricants. In normal day-to-day operation, natural gas is used to fuel boilers on Base during the winter heating season, with some major boiler installations remaining on-line all year.
- 2. <u>Conservation Measures (Facilities)</u>. Building/facility users will act to conserve LP gas and heating fuels as follows:
  - a. BEQ, BOQ, Administrative Spaces, and Family Housing
- (1) <u>Cooling</u>. Spaces requiring comfort cooling shall be maintained at temperatures no lower than 76 degrees F. During unoccupied hours, cooling systems will be turned off when appropriate.
- (2) <u>Heating</u>. Spaces requiring comfort heating shall be maintained at temperatures no higher than 70 degrees F. During unoccupied hours, temperatures shall be set no higher than 55 degrees F.
- b. In laboratories, shops, warehouses, etc., temperatures shall be maintained to minimize energy consumption with 55 degrees being maximum for heating purposes in storage spaces.
- c. Develop contingency plans for reduction/cessation of operations to secure areas on the selective/priority basis. Plan will include closing major warehouses; morale, recreation, and welfare facilities; and major storage/administrative facilities.

d. The Maintenance Officer will cooperate in scheduling Base LP Gas Plant operations with City of Albany and other gas suppliers. He will also schedule preventive and corrective maintenance on fossil fuel-consuming equipment/facilities to minimize fuel usage rates.

### 3. Conservation Measures (Transportation Equipment)

- a. Select equipment to fit requirement, i.e., use bicycles for intershop, to and from offices, etc., and use the smallest equipment that will support the requirement.
- b. Schedule trips to eliminate duplication. This can be accomplished by publishing a schedule of routine runs, and encouraging personnel to utilize them, verifying that dispatcher makes every attempt to pool requests to eliminate duplication; and combining runs between activities.
- c. Ensure that required maintenance and operational checks are performed on a scheduled basis; checking tires for proper inflation; and checking records of consumption to spot improperly maintained vehicles.
- d. Promote conservation habits for all drivers of Government vehicles, i.e., avoid unnecessary trips; avoid fast starts and sudden stops; observing all speed limits; and use of the most direct route between location and destination.

ENCLOSURE (3)

# QUARTERLY BUILDING ENERGY MONITOR CHECKLIST (Report Control Symbol MCLBA-11300-01)

#### MONITOR'S NAME, SECTION, PHONE, DATE:

#### HEATING AND COOLING

- 1. Close off unused areas and rooms not in use YES/NO
- 2. Air conditioners left running YES/NO
- 3. Air conditioning or heating vents obstructed YES/NO
- 4. Exterior doors left open YES/NO
- 5. Windows left open YES/NO
- 6. Room temperature too high during occupied periods (winter) YES/NO
- 7. Room temperature too high during unoccupied periods (winter) YES/NO
- 8. Room temperature too low during occupied periods (summer) YES/NO
- 9. Room temperature too low during unoccupied periods (summer) YES/NO
- 10. Thermostat damaged YES/NO
- 11. Air filters dirty YES/NO
- 12. Lights left on in unoccupied areas YES/NO
- 13. Lights in use when daylight is sufficient YES/NO
- 14. Exterior lights on in daytime YES/NO
- 15. Light levels too high in corridors, stairwells, etc. YES/NO
- 16. Dirt on surfaces of lamps/lights reflecting or
- diffusing surfaces of fixtures YES/NO
- 17. Excessive interior illumination YES/NO

- 18. Light bulbs used with excessive wattage YES/NO
- 19. Equipment left running when not in use YES/NO
- 20. Personal heaters/coffee pots/crock pots in use YES/NO
- 21. Vending machines on during weekend when food spoilage is not a problem YES/NO
- 22. Light bulbs removed from vending machines YES/NO

#### **WATER**

- 23. Leaking faucets YES/NO
- 24. Hosing being used to clean sidewalks/pavement YES/NO
- 25. Hot water pipe insulation is missing/damaged
- 26. Hot water delivery in prohibited areas i.e., toilets, administrative areas YES/NO
- 27. Steam/water leak in pipes YES/NO
- 28. Refrigerator unit in drinking fount in use after normal working hours YES/NO

#### **BUILDINGS**

- 29. Gaskets around refrigerator doors are not tight YES/NO
- 30. Refrigerator needs defrosting YES/NO
- 31. Broken windows/doors YES/NO
- 32. Misaligned exterior doors YES/NO
- 33. Cracked caulking around windows/doors/exterior joints YES/NO
- 34. Shades/curtains are missing on windows YES/NO
- 35. Exhaust air outlets with no dampers YES/NO

#### REMARKS

ENCLOSURE (5)